LONG-RUN TARGETS Donald L. Kohn

As background for consideration of the ranges for money and credit for 1989 and 1990, the bluebook on page 8 described the results of three alternative policy strategies. Three areas might be considered in thinking about these strategies and the choice of money and debt growth ranges. The first involves the objectives for policy, in terms of the speed with which price stability is sought; the second, the pattern of money growth most likely to be consistent with achieving those objectives; and the third, the risks to achieving those objectives and the choices that might be made if forces in the economy deviate from expectations.

Strategy I, the baseline forecast, is the same extension of the greenbook forecast used by Mike and Ted. It represents a monetary policy designed to achieve a gradual reduction in inflation over time. The alternative strategies take the basic economic structure and assumptions of the baseline and use model simulations to look at the consequences of alternative monetary policies. Strategy II, which embodies a tighter monetary policy over the forecast horizon, as indexed by 1 percentage point less M2 growth than in the baseline, would make faster and more noticeable progress against inflation. But such progress involves essentially no growth in the economy next year. This result stems from the judgment embodied in the baseline forecast that the economy is starting from a position of greater resource utilization than is consistent with containing, much less reducing, inflation. If this judgment

is correct, appreciable progress against inflation within the next few years requires a marked deceleration in economic growth in order to open up a margin of slack in the economy fairly promptly, as indicated by the sizable rise in the unemployment rate. Strategy III, which uses faster money growth than the baseline, holds the unemployment rate at close to current levels over the forecast horizon. Given the lags between output and prices, this strategy results in only a small increase in inflation through 1991; however, price increases would not only be faster than in the other two strategies, they would be on an upward trajectory coming out of 1991.

Under all the strategies M2 grows noticeably more rapidly over 1990 and 1991 than it has in recent years. Over the past few years, the sizable increases in nominal interest rates required to head off inflation damped money demand and raised velocity. An underlying presumption of the baseline forecast is that real interest rates already are at levels that probably are high enough at least to keep inflation from accelerating, given the outlook for other key factors acting on the economy--notably fiscal policy and the dollar. Consequently, while interest rates move in different directions in 1989 and 1990 under the various strategies, the size of the movements is quite moderate by the standards of the past few years -- and so are the associated changes in money velocities. By the end of the simulation period, nominal shortterm rates end up at about the same level under all the strategies -somewhat below their current level. In these circumstances, velocity will tend to fall a little, so that for a while more rapid growth of money will be needed to support moderate expansion of nominal income.

Note that velocity declines even under the tighter alternative II strategy, as nominal interest rates move downward in response to slower inflation.

Eventually, once we have reached and adjusted to price stability, M2 probably will need to expand much less rapidly—around the rate of potential output growth. But given the inflation already embedded in the economy and interest rates, keeping money growth at the rate expected for 1989 or reducing it toward the eventual objective in the period ahead would likely involve substantial shortfalls in output. In the transition period, the challenge will be to differentiate declining interest rates and faster money growth associated with the restoration of price stability from the even more rapid growth and larger declines in interest rates that would signal an overly expansive policy.

Not only the pattern of monetary growth consistent with various long-run strategies, but also the risks to the economy and prices might be considered in choosing the long-run ranges. Mike and Ted have already discussed two major areas of uncertainty—the behavior of wages and the dollar. Others include the underlying strength of demand, and the relationship of money, income, and interest rates. The levels of the monetary ranges, say relative to expected income growth, would be one way of communicating to the public the Federal Reserve's view of the risks in the outlook and something about how we might respond to deviations of results from expectations.

For 1989, the current ranges seem likely to encompass the money growth consistent with most possible strategies and contingencies. The

staff forecast is that M2, M3, and debt will all grow within their current ranges under the interest rate and income projections of the Greenbook. Debt is now well within its range, and M3 at the lower end of its range, but for M2, this requires a substantial pickup from the pace of the first half of the year.

Expectations of such an acceleration rest on two factors. First, is the behavior of interest rates. The slow growth of money relative to income since mid-1988 is largely attributable to the rise in interest rates through the first quarter of 1989. In the projection, interest rates remain in the neighborhood of current levels over the balance of the year. These rates and associated opportunity costs are below those prevailing through most of the first half of the year. However, some of this decline will offset the lagged effects of previous increases, and on balance we expect opportunity cost and interest rate factors to boost money demand relative to income modestly in the second half of the year. Second, we do not anticipate any special factors that would damp money demand relative to fundamental trends in the second half. Indeed, the rebuilding of money balances that were drawn down to pay taxes in April probably will still be boosting money growth rates a little, just to restore holdings to desired levels. On net, velocity is expected to decline somewhat in the second half of the year, with 6 percent M2 growth relative to 5 percent GNP growth. This would bring M2 growth for 1989 to 4 percent. With some of this acceleration showing through to M3, it too should be well within its range by the fourth quarter.

We believe the risks to this money projection are fairly evenly balanced on either side. But because the expected outcome is in the lower part of the range there is some possibility of M2 coming in below the range. Whether the range should be lowered to allow for that possibility depends on whether such a shortfall—say to 2-1/2 percent would be acceptable to the Committee. Growth below the 3 percent lower end of the range would not be a concern if it reflected only a downward shift in money demand for given interest rates and income, or if it resulted from a deliberate tightening of the money supply, for example, to combat a potential resurgence of inflation pressures. However, a shortfall in money owing to a weaker economy would not be desirable. If this were thought to be an important risk, then the Committee would not want to accept M2 growth below 3 percent, or signal a willingness to do

The choices for 1990 depend more directly on the speed with which the Committee wishes to approach price stability and the associated trajectory of money. Since under any of the strategies somewhat stronger money growth is projected to be necessary to support even sluggish expansion in output next year, the issue raised is whether the Committee should continue on its course of lowering money ranges each year.

For 1990, the staff greenbook forecast is thought to be consistent with M2 growth of around 6-1/2 percent. As noted earlier, this results from the fairly flat pattern of interest rates, and hence velocity, that is projected to accompany nominal GNP growth of around 6 percent next year. The pickup in M3 is expected to be much less--to 6

percent, partly in light of downward pressures on thrift asset growth from new capital requirements and RTC resolutions. Debt growth, on the other hand, is projected to slow a little further to 7-1/2 percent, after coming in below the midpoint of its range in 1989. In both years, lower federal deficits are a key element accounting for more moderate debt growth. I might note that growth in money and debt along these lines is likely also to be consistent with your economic projections on average, since the staff forecast for nominal GNP is approximately in the middle of the range of projections by board members and presidents.

Three possible alternatives for the ranges for 1990 are presented on p. 14 of the bluebook. To an extent, the alternatives were shaped by the staff expectations that M2 growth in 1990 may be near the upper end of the existing ranges for 1989. If the Committee wished to pursue a more expansive policy in 1990 than assumed in the baseline, an increase in the M2 range would seem necessary. Such an increase is incorporated into alternative I. This alternative carried over the 1989 ranges for M3 and debt, since the ranges for those aggregates already have ample scope for somewhat faster growth than in the staff projection. Alternative I might also be appropriate if there were thought to be a risk of significantly weaker aggregate demand in 1990 than in the staff forecast. In these circumstances, faster money growth would be needed to get output growth along the lines of the staff forecast.

Thus, alternative I would seem most consistent with a concern about the pace of economic expansion.

Alternative II retains the current M2 range, while lowering those for M3 and debt by 1/2 point. Retaining the M2 range, rather than

reducing it further as in the past three years, could be justified on the grounds that at this time the outlook for velocity in 1990 is unclear. Assuming no change in velocity, FOMC expectations for income growth already would place M2 in the upper half of its current range. With money expected to run well up in the alternative II ranges, this choice implies a limited tolerance of overshoots of money relative to expectations. These ranges could be construed as accommodating a moderate pace of nominal income growth next year, but also as signalling an intention to lean against a tendency for inflation to strengthen appreciably, and they would tend to constrain an aggressive move toward an easier policy.

Alternative III lowers all the ranges, with money ranges being reduced 1/2 percentage point and debt one full percentage point. This alternative would seem consistent primarily with an intention to make more immediate progress on inflation, as under strategy II. Such a policy need not be associated with as weak output as in the simulation exercise if underlying demands in the economy were strong or if the staff's expectations on inflation were thought to be too pessimistic. In the latter of these circumstances, the reduced ranges of this alternative could be seen as taking the bonus from, say, better wage behavior more in prices than occurrs under the unchanged policy assumptions used by Mike in his simulations.

Finally, the Committee could opt to simply carry over the existing ranges. This was not presented as an option in the bluebook, perhaps because it wasn't sufficiently complicated and conducive to

conveying subtle policy overtones for the gnomes who draft that document. But it might be justified by the uncertainties in the outlook, some elements of which are likely to be a little clearer next February. In any case, it may be well to remember that one or another of the provisional ranges established in July have been changed the following February in 8 of the 10 years this exercise has been carried out.

SHORT-RUN OPTIONS Donald L. Kohn

The movements of short-term interest rates over the intermeeting period reflected not only the easing of policy in early June, but also expectations of further System actions. Following the declines yesterday, the structure of market rates, along with the commentary of market participants, now suggest that an additional 1/4 of a percentage point drop in the funds rate is anticipated shortly after this meeting, with another decline of 1/4 point or more within the next few months. From one perspective, the choice facing the Committee can be framed in terms of whether, or to what extent, those expectations should be validated.

Given these expectations, holding the funds rate steady would be expected to result in some increase in short-term interest rates, as discussed under alternative B in the bluebook. The extent of any increase, and its transmission to the long end of the yield curve, would depend importantly on whether incoming information on the economy, prices and the dollar continued to support the view that aggregate demand was weak and that policy would be easier before long. To be sure, if the market became convinced we were not about to ease under any foreseeable circumstances, short-term rates would backup substantially, though the effect on long-term rates is unclear. More likely, unless developments suggest a stronger economy or prices than in the staff forecast, only a small backup in rates would occur--leaving short- and long-term rates well below levels of a month or two ago.

expected by the markets would be a reading of recent data that was roughly in accord with the market's interpretation—that is, at higher nominal and real interest rates there would be a significant risk of a weaker economy than needed to achieve the desired progress against inflation. Such a judgment has been echoed in commodity markets, where prices on average have lagged the general rate of inflation for a while, tending to reinforce the notion of sluggish industrial activity and effectively restrictive real interest rates. Moreover, although reasons for the dollar's firmness on balance this year may not be fully understood, absent a more complete reversal, the higher dollar will tend to restrain prices and demand in the United States.

However, market expectations embedded in the downward slope of the yield curve need to be read with caution. At the very short end, as noted, they reflect market anticipation of Federal Reserve actions based on a reading of your objectives. One question is whether such a reading includes a sustained decrease in inflation. There is little evidence in recent surveys of consumers or financial market participants of a significant decrease in inflation expectations in June below the area of earlier this year. It may be that the drop in rates built into the yield curve is consistent with the market's view of a policy that contains, but does not necessarily reduce, inflation rates over time. Certainly, the behavior of the stock market, even taking account of last week's correction, does not seem to suggest expectations of as prolonged a weakness in the economy and profits that, in the staff forecast or

simulations, would be a necessary byproduct of restraining the economy sufficiently to bring inflation down.

If long-term inflation expectations have not changed much, most of the decline in long-term interest rates would represent a drop in real rates. To the extent such a decrease were needed to cushion the effects of weaker aggregate demand, leaning against it with an unchanged monetary policy could result in a shortfall in spending. To be sure, the effects of a stronger dollar, smaller budget deficit, and weaker spending propensities all argue for lower equilibrium real rates than in early spring. But asset markets do over-react, and in the recent period, interpretation of financial price movements is complicated by complex interactions with the dollar. If some of the demands for dollar assets represented a shift of desired international portfolios unrelated to the anticipated performance of the U.S. economy, say political turmoil abroad or a speculative bubble, then bond yields may have fallen below levels consistent, over time, with satisfactory economic performance. And the strength of the dollar undoubtedly has held down commodity prices. The interdependencies of the prices of these various assets and difficulty in predicting how they would react to an easing of policy was illustrated yesterday. The decline in short-term rates then was said to reflect more firmly entrenched expectations of an easing of policy, which contributed to a sharp drop in the dollar and associated rise in commodity prices, as expected, but also a slight backup in bond vields.

The behavior of the monetary aggregates does not lend clear guidance to today's policy choice. M2 remains well below its target

cone, but it appears to be in an upward trajectory. Even under the slight uptick in market rates under alternative B, M2 is expected to be within its cone by September. The interest rates of this alternative would still be well below those of the previous two quarters, and households are projected to continue to rebuild balances depleted by outsized tax payments in April. However, an early easing of policy, as under alternative A, could be seen as providing some greater assurance of acceptable monetary growth for the year.

Whatever alternative is selected, the Committee might want to consider whether to continue to give a little extra emphasis to money growth in keying intermeeting adjustments to reserve pressures. If there were concern about excessive weakness in the economy, a shortfall in money growth would be inappropriate absent special circumstances. In the last few years, the Committee has steered a course in which a stabilizing policy was suggested by strong money growth when the economy seemed weak, and slow money growth when inflation was a threat. The situation to be avoided would be one in which a very weak economy was accompanied by weak money growth.

The Committee's intentions will be signalled by its instructions for intermeeting adjustments as well as its decision about the immediate stance in reserve markets. Asymmetry toward ease would be appropriate if the Committee felt the risks were heavily toward weaker activity than was consistent with its longer-run objectives. In this circumstance, more weight ought to be placed on incoming data indicating a spending shortfall and policy responses to such data ought to be prompt. Especially if coupled with an immediate easing in policy, such

a directive would suggest that the Committee viewed the developing situation as likely to call for a series of easing moves. A symmetric directive would suggest a more cautious response to incoming data, and less of a prejudgment about future policy steps.

With regard to implementing policy, in framing the borrowing objectives in the bluebook associated with each alternative we attempted to take account of the continued strength in seasonal borrowing. We had expected further increases in seasonal borrowing over the last intermeeting period, but the recent rise has been greater than anticipated. At the same time, adjustment borrowing has been minimal, partly, reflecting the large volume of reserves supplied by the seasonal borrowers. But adjustment borrowing still is surprisingly low given the federal funds-discount rate spread. The staff made adjustments in the bluebook borrowing assumptions to take account of the developments at the discount window. First is an upward adjustment to alternative B to \$650 million; this allows for some additional increase in seasonal borrowing, which has been running around \$500 million recently. The second adjustment is to the borrowing levels associated with a drop in the federal funds rate under alternative A. Because adjustment borrowing is close to frictional levels, we presumed that any decrease in borrowing associated with an easing of reserve pressures would be concentrated in the seasonal component. Seasonal borrowing responds to the spread between market and discount rates, but by less than adjustment borrow-Under these circumstances, a smaller drop in total seasonal plus adjustment borrowing is likely to be associated with a given drop in the funds rate; we estimated it at half the usual size, or \$100 million from the upward adjusted alternative B path for a 50 basis point decline in the funds rate.